

organ of smell, it does not appear until after exclusion; and this is the case also with the rudiments of the generative organs.

The two blastodermic lamellæ, which play so important a part in the development of the *Sepiolæ*, are called by M. Mecznirow the *epithelial* (exterior) and *parenchymatous* (interior) lamellæ. The author does not use these terms in an absolute sense, since the epithelial membranes of the vessels are formed at the expense of the interior lamella. We may say that the epithelial lamella gives origin to the general envelope of the body, the cartilages, the organs of sense and digestion (except the pharynx), and the ink-bag. The inner layer gives origin to the muscles, the nervous system, the mass of the pharynx, and the vascular system. According to M. Mecznirow, these two lamellæ correspond exactly to what he has described in the embryos of the scorpions.

From the preceding statements it appears that the formation of the nervous system of the *Sepiolæ* cannot be paralleled with that of the same system in the Vertebrata. On the other hand, the formation of the skin and of the organs of sense in the *Sepiolæ* is effected, as in the Vertebrata, at the expense of the interior lamella. Hensen's observations upon chickens seem also to authorize a parallelism between the formation of the internal skeleton of the *Sepiolæ* and that of the *chorda dorsalis* in the Vertebrata. The intestinal canal of the *Sepiolæ* is produced chiefly at the expense of the epithelial lamella, which is not usually the case in Vertebrata. However, in *Amphioxus*, according to M. Kowalewsky, the intestinal canal is formed by an invagination of the epithelial lamella. M. Mecznirow rejects all analogy between the foot of the Cephalophora and the siphon (*infundibulum*) of the Cephalopoda. He is equally adverse to the hypothesis of M. Häckel, according to which the Pteropoda are the immediate ancestors of the Cephalopoda.—*Bibl. Univ.* Oct. 25, 1867; *Bull. Sci.* pp. 186-192.

M. LeVaillant, the African Traveller.

Mr. Edgar Layard says:—"I have been at some little pains to trace LeVaillant's footsteps in Southern Africa, in order, if possible, to identify such of the birds as have been introduced into his great work as South African, but which are supposed by some to have been obtained from other countries. A statement which appeared some time ago in the serial 'Household Words,' to the effect that LeVaillant never was in South Africa, also stimulated my desire to obtain full information regarding him.

"I need not follow him through all his wanderings at this moment; this I may perhaps do at some future time. Suffice it for my present purpose to say that I do not believe that he ever crossed the Orange River.

"He describes in his travels how he was floated across the swollen river, and his chase after the giraffe. I question much if this account is true. There was living at Camiesburg, within the last few years, an aged woman named Van Zyl, who related to my informant that

she well remembered the 'kleine Franschman' (little Frenchman), as she called him—that, during his stay in that part of the country, he lodged entirely at her house—and that he never crossed the Orange River, being too much of a coward so to do. When told that he had stated he had shot the giraffe, she scouted the idea, and declared that the skin which he took away was brought piecemeal, from the opposite side of the river, by his Hottentots. Mrs. Van Zyl was a huge, raw-boned woman, who stood upwards of six feet, and usually wound up her narrative concerning LeVaillant by laughingly relating how she had horse-whipped the 'little Frenchman' for attempting some liberties with her."—*The Birds of South Africa*, 8vo, Cape Town, 1867, p. 139.

Investigations on Rhabditis terricola. By M. J. PEREZ.
(Notice by M. E. Claparède.)

The animal which constitutes the subject of this memoir has been determined by the author as *Rhabditis terricola* (Duj.). He found it first in the eggs of slugs, but soon found that this was a phenomenon of pseudoparasitism. The entire eggs contained no Nematodes, but those which were crushed had them in great numbers: the decomposing albumen had attracted them. The worm, in fact, lives freely in the earth, and multiplies with great rapidity wherever it finds albuminous matters in decomposition. It may be remarked, in connexion with this, that M. Schneider some years ago observed the same phenomenon as M. Perez, and made the same experiments. M. Schneider even ascertained that a great number of species exist under these conditions. Finding the genus *Rhabditis* of Dujardin imperfectly characterized, he described these worms at first under the name of *Pelodytes*, and afterwards under those of *Pelodera* and *Leptodera*. In our opinion, he would have done better had he retained the name of *Rhabditis* for one at least of these two genera. However this may be, the worms chiefly studied by M. Perez belong to the genus *Leptodera*; some figures only (especially pl. 7. fig. 2), which M. Perez himself admits represent exceptional forms, belong to *Pelodera* (Schn.). It is, therefore, not impossible that the author's observations relate to several species.

It is impossible for us to follow M. Perez in his very detailed anatomical investigation of his *Rhabditides*. Nor could this be done without establishing a detailed parallel with the fine monograph on the Nematodea of M. Schneider, which appeared shortly after the memoir of M. Perez. Certain questions of cellular morphology, treated with great care by the author, also cannot be discussed here. We shall only express our regret that the author has not taken into consideration the ideas of the new cellular school (Lionel Beale, Brücke, Max Schultze, Häckel, &c.). To make up for this, we shall dwell upon some very interesting observations relative to the development of the *Rhabditides*.

The ova are developed and hatched in the interior of the terus. But the intra-uterine life does not terminate here. The ousg